

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 5 and 21 in accordance with the following:

1-4. (CANCELLED)

5. (CURRENTLY AMENDED) A method of analyzing three-dimensional structures including a first structure expressed by three-dimensional coordinates of elements belonging to a first point set and a second structure expressed by three-dimensional coordinates of elements belonging to a second point set, comprising:

a) generating, by a superposition calculating unit, a combination of correspondence satisfying a condition between the elements belonging to the first point set and the elements belonging to the second point set from among all candidates for the combination of correspondence, wherein the condition includes generating an optimum combination in view of at least one of a geometric relationship between the first and second point sets, a threshold value condition in relating the elements of the first and second point sets, and refining the elements of the first and second point sets based on at least one of an attribute of the elements of the first and second point sets;

b) calculating, by the superposition calculating unit, a root mean square distance between the elements belonging to the first point set ~~corresponding~~relating to the elements belonging to the second point set in the combination of correspondence generated in the generating; and

c) displaying, by a graphic display unit, the three-dimensional structures of the first structure and the second structure in an overlapped manner based on the calculating, wherein the first and second three-dimensional structures are at least one of a protein molecule, and

wherein the first and second point sets are sequence listings defining the first and second three-dimensional structures.

6. (PREVIOUSLY PRESENTED) A method of claim 5, wherein the condition includes order relation of the elements in the first and the second point sets that are ordered.

7. (PREVIOUSLY PRESENTED) A method of claim 5, wherein the condition includes proximity in a geometric relationship among a plurality of elements close to each other.

8. (PREVIOUSLY PRESENTED) A method of claim 6 wherein the condition includes proximity in a geometric relationship among a plurality of elements close to each other.

9. (PREVIOUSLY PRESENTED) A method of claim 5, wherein the condition includes a condition such that a candidate for the combination of correspondence satisfies a threshold value condition.

10. (PREVIOUSLY PRESENTED) A method of claim 6, wherein the condition includes a condition such that a candidate for the combination of correspondence satisfies a threshold value condition.

11. (PREVIOUSLY PRESENTED) A method of claim 5, wherein the condition includes a condition such that an attribute value of each of the elements belonging to the first point set coincides with an attribute value of the corresponding element belonging to the second point set in a candidate for the combination of correspondence.

12-20. (CANCELLED)

21. (CURRENTLY AMENDED) An apparatus for analyzing three-dimensional structures including a first structure expressed by three-dimensional coordinates of elements belonging to a first point set and a second structure expressed by three-dimensional coordinates of elements belonging to a second point set, comprising:

a superposition calculating unit generating a combination of correspondence satisfying a condition between the elements belonging to the first point set and the elements belonging to the second point set from among all candidates for the combination of correspondence, and calculating a root mean square distance between the elements belonging to the first point set corresponding relating to the elements belonging to the second point set in the combination of

correspondence generated, wherein the condition includes generating an optimum combination in view of at least one of a geometric relationship between the first and second point sets, a threshold value condition in relating the elements of the first and second point sets, and refining the elements of the first and second point sets based on at least one of an attribute of the elements of the first and second point sets; and

a graphic display unit displaying the three-dimensional structures of the first structure and the second structure in an overlapped manner based on the calculating,

wherein the first and second three-dimensional structures are at least one of a protein molecule, and

wherein the first and second point sets are sequence listings defining the first and second three-dimensional structures.

22-23. (CANCELLED)

24. (PREVIOUSLY PRESENTED) The method of claim 6, wherein the condition includes a condition such that an attribute value of each of the elements belonging to the first point set coincides with an attribute value of the corresponding element belonging to the second point set in a candidate for combination of correspondence.